The investment model of volunteering in the EU-27 countries: volunteering, skills development and employability. A multi-level analysis.

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This article contributes to a better understanding of the social acceptance of the investment model of volunteering, that is, the view that volunteering can enhance employability through the development of professionally relevant knowledge and competences. Based on the analysis of Eurobarometer data, the article explores: (1) the prevalence of the investment model of volunteering in the EU-27 countries and the extent to which this varies between individuals with the potential to make hiring decisions (IHP) and the general population, (2) the demographic factors associated with the acceptance of this model, (3) whether national differences in the acceptance of the model are better explained by variation between countries or cross-national demographic factors and (4) whether national institutional characteristics related to the competitiveness of the national labour market, the specificity of the education system, the strength of the continuing vocational training system and cultural factors influence acceptance. The results show that the acceptance of the investment model of volunteering is relatively widespread in Europe and that variation in the acceptance of the investment model amongst the general population is driven by both individual (age and class) and between-country differences (related to the strength of training for unemployed people), but variation is more attributable to differences between countries than cross-national demographic groups. IHP, on the other hand, tend to be more homogenous in their acceptance of the investment model than the general population.

1. Introduction: employability and the investment model of volunteering

This article contributes to a better understanding of the social acceptance of the investment model of volunteering, based on the view that volunteering can enhance employability through the development of professionally relevant knowledge and competences (Roy and Ziemek 2000:14)[1]'. Employability can be defined as the relative chance of finding and maintaining different kinds of employment (Brown et al. 2002). It has two dimensions: an absolute dimension, related to individual attributes such as skills and knowledge, and a relative dimension, related to the variable conditions of the labour market, which also affect the degree to which an individual can gain employment (Brown and Hesketh 2004). The paper focuses on the absolute

[1] Extended versions of this model include also the acquisition of useful contacts and the signaling of one's ability to prospective employers, in addition to the development of knowledge and competences (Duncan 1999).

dimension, which cannot tackle unemployment problems on its own but is an important element of the 'employability mix'.

The article makes use of survey data from European Union (EU 27) countries, complemented with Eurostat, Hofstede and UNESCO data for national institutional variables, to explore the extent to which Europeans see volunteering as being conducive to the acquisition of knowledge and competences that facilitate employability. In doing so it responds to recent calls for greater empirical evidence on the value of volunteering (Tymon 2013). The lack of evidence in this area is unexpected given that a major motivator for volunteering is the opportunity to acquire work-related experience and skills that can help them in their careers (Eley 2003). While specific figures on the number of volunteers differ according to the survey and definitions employed, all studied confirm that the take-up of volunteering is substantial with between 100 and 150 million Europeans (around one in five to one in three) engaged in volunteering each year (see also GHK 2010).

This article focuses on *social perceptions* regarding knowledge and competence development through volunteering. This is crucial because social perceptions can be expected to mediate the effects of volunteering in social interactions, including hiring. The nature of this mediation, in turn, can affect individuals' decision to volunteer (Friedland and Morimoto 2005). While the relation between perceptions and behaviour is undoubtedly complex, a first step in analysing such relationship is to clarify what those perceptions and those behaviours are in relation the area of interest. In addition, a better understanding of social perceptions on volunteering can help to inform the design and implementation of policy decisions in this area (Snyder and Omoto 2008). Thus, it is surprising that extant literature has neglected the

analysis of the social assumptions that surround the outcomes of volunteering, which are embedded in the way in which volunteering is socially perceived and recognised.

In its empirical part the article analyses general social views –or the views of the general population- on the benefits of volunteering for labour market relevant competence development, and also the views of those individuals who have the potential to influence hiring decisions (IHP) –or likely 'recruiters/ employers'. Second, the relationship between socio-demographic variables and the acceptance of the investment model of volunteering is examined. Finally, we explore whether national differences in the acceptance of the investment model of volunteering are better explained by variation between countries institutional arrangements or cross-national demographic groups.

It should be noted that the focus on the investment model does not aim to deny the importance of factors other than employability for volunteers, for instance those related to altruism, social and personal development (Handy et al. 2010; Holdsworth 2010). It does not deny that volunteering can have negative effects either (Eliasoph 1998), and does not suggest that all types of volunteering activities and engagement could be expected to have the same returns on competence development and employability. The article's findings are particularly relevant to young people. In a substantial number of countries, young people exhibit the highest level of volunteering (GHK 2010), and it is for this group that the signalling value of volunteering experiences are likely to count the most, given that they have little experience in the labour market (Katz and Rosenberg 2005; Hall et al. 2006).

The paper is structured as follows: section 2 takes stock of relevant literature on competence development and employability enhancement through volunteering and

social views of volunteering. Section 3 explains the data and methods used for the analysis. Section 4 presents the findings, and section 5 concludes.

2. Literature review: competence development through volunteering and their documentation in recruitment processes

This section outlines the main premises of the investment model of volunteering, and the socio-demographic factors that may affect the acceptance of this model, from which we derive a range of variables employed in our analysis. This is followed by a discussion of the empirical base of the relationship between volunteering and competence development and volunteering and employability, which underpin the premises of the investment model.

2.1 The investment model of volunteering

2.1.1 Main premises

Volunteering has been theorised from a range of disciplines: economics, sociology, political science and psychology (see Hustinx et al. 2010a). Such theorisation has focused, above all, on *who volunteers and motivations to volunteer* (Hustinx et al. 2010b; Wilson 2000). Much research has been conducted on motivations to volunteer (Holdsworth 2010; Perry et al. 2008; Rotolo and Wilson 2007; Taniguchi 2006; Bussell and Forbes 2002; Becker and Dhingra 2001; Wilson 2000). One of the main findings of extant research is that the motivation to volunteer is based upon a complex interplay between altruistic, individualistic and social factors (Haski-Levental 2009).

Regarding the outcomes of volunteering, its health and wellbeing benefits have been subject to much analysis (Konrath Fuhrel-Forbis, Louand Brown, 2012; Morrow-Howell, Hong and Tang 2009; Meier and Stutzer 2008). Its wider benefits to the

families of volunteers, organisations and the wider community have also been explored (Handy and Mook 2010; Morrow-Howell, Hong and Tang 2009; Handy and Srinivasan 2004). By contrast, the literature has paid much less attention to the labour-market outcomes of volunteering or the specific mechanisms through which these may derive: such as increases in labour market relevant connections (Wilson and Musick 1999), empowerment (Cohen 2009) or the acquisition of competences and knowledge through the volunteering experience (Souto-Otero et al. 2005; Callow 2004). Moreover, as Smith et al. (2010:69) and Holdsworth and Quinn (2010) note, most studies that have looked broadly at the motivations and benefits of volunteering have collected data only from active volunteers. This is also the case in studies that have explored increases in knowledge, skills or competences and employability through volunteering (Souto-Otero 2016; Booth, Park, and Glomb 2009; MacNeela 2008; Surujlal and Dhurup 2008; Handy and Srinivasan 2004). This limitation has led to calls for greater empirical evidence on the value of volunteering (Tymon 2013).

This article is concerned, specifically, with the investment value of volunteering, reflecting the 'consumerist view of volunteering', as articulated by Kendall (2009). The 'signalling value of volunteering' and the investment model of volunteering relate volunteering to the expectation of a private benefit or return (Ziemek 2006). The investment model proposes that volunteers acquire knowledge, skills and competences, enhancing their human capital (Hustinx et al. 2010b). Human capital development through volunteering can be 'signalled' (Spence 1973) to employers in recruitment processes, as applicants aim to offer employers convincing signals of their employability. Thus, the 'signalling value' theory proposes that volunteering can be used as a signalling device that provides recruiters with information on the potential of individuals (Katz and Rosenberg 2005). It should be noted that, while

related, the signalling value of volunteering is different from the investment model –in fact for signalling to work it is not necessary that the volunteer develops professionally relevant knowledge and competences, as long as participation in volunteering conveys information about the likely ability of the applicant to employers.

2.1.2 Factors affecting the acceptance of the investment model

In the absence of previous research on social and labour market acceptance of the investment value of volunteering, this section builds upon the literature on motivations to volunteer to identify relevant variables for our analysis. In doing so, the article examines whether the factors that influence social perceptions of the benefits of volunteering are similar to those that the literature has suggested are related to the adoption of the investment model as a motivation to volunteer.

The literature identifies several factors that affect whether the investment model is a motivation for volunteers. The literature has produced results regarding the relationship between gender and age and motivations to volunteer. Hustinx et al. (2010b), found that females were more likely to follow an investment model motivation to volunteer than males. They found age to be negatively correlated with motivations for volunteering related to resume building and signalling value: younger people think about the labour market value of volunteering more strongly than older people.

The literature has repeatedly found a positive association between levels of education (Bekkers 2006; Gesthuizen and Scheepers 2012) and the acceptance of the investment view. While there is evidence that in some countries the effect of education in volunteering is decreasing (Van Ingen and Dekker 2011), as explained by Handy et al. (2010) university applicants can benefit substantially from the

signalling value of volunteering in university recruitment processes, and university students are significantly more likely to volunteer than other individuals in the same age group, which suggests that volunteering may have greater benefits for them. Following a similar logic in relation to occupational status, those individuals with more limited links with the labour market are seen to be more willing to accept the value of other forms of acquisition of professionally relevant knowledge and competences than through professional experience (Katz and Rosenberg 2005).

With respect to social positioning, Hustinx et al. (2010b) reported no effect of family income on the adoption of motivations to volunteer associated with resume building and signalling value. With respect to geographical positioning, given that networks in rural settings tend to contain ties of greater intensity and density and be based more on kinship and neighbourhood solidarities rather than other types of logics (Beggs et al. 1996), we also expect the integrative function to be higher in rural areas than in urban areas.

Household composition –the number of young children in the household-, has been found to affect views on the purpose of volunteering. Through the membership of their children or school activities parents have higher chances to be asked to volunteer, and could be more receptive to the integrative role of volunteering rather than its investment value. The role of children directing their parents into volunteering activities of such integrative nature is strongest for children who are going to school but are yet to become independent (Van Ingen and Dekker 2011, Rotolo and Wilson 2007).

Participants in volunteering could be expected to be more likely to report the skills development benefits of participation (Hustinx et al. 2010a) because they have first-

hand experience of skills development and because some participants who were motivated to volunteer by the investment model would be likely to report this benefit.

Our analysis of the effect of political ideology is exploratory, as this variable has not often been included in previous studies of the determinants of volunteering. We expect that people from the left are less inclined to report the acquisition of competences as one of the main benefits of participation in volunteering, as they prioritise other benefits, associated with prosociality, social solidarity and cohesion (Van Lange, Bekkers, Chirumbolo and Leone 2012).

The factors identified are thus related to ascriptive elements regarding 'who one is' (gender, age) as well as factors related to 'achievement' (education, employment status) 'where one is' (geographical and social geographies), the contact one has with volunteering (volunteering intensity, household composition), and how one sees the organisation of society (political ideologies). While ethnicity and religion have also been found to affect views of volunteering (Musick et al. 2000; Ruiter and De Graaf 2006), the Eurobarometer survey employed for this study did not include data on these variables.

It should be noted that the investment model is not accepted or rejected by individuals in an institutional vacuum. It can be institutionally induced as, for instance, increasingly educational institutions require students to take-up volunteering in exchange for credits. Companies may do the same for employees, in exchange for time-off from paid work (Basil et al. 2009). So support for this model may not only reflect changes in the motivations of volunteers, but also institutional incentives and requirements. Handy et al. (2010) note that labour market signals often are context-

specific, and this may affect the degree of acceptance of the investment model of volunteering.

Thus, in our analysis, we explore the importance of institutional factors in the acceptance of the investment model of volunteering. Specifically, we include in our analysis a measure of the competitiveness of the labour market, the specificity of the education system, the strength of the continuing vocational training system (both employed and training under active labour market policies for unemployed people) and culture influence the adoption of the model –see section 3 for further details.

2.2 Volunteering and competence development: the empirical base

There are very few studies that focus on competence development through volunteering, and fewer on the extent to which this may affect the employability. As noted by Ellis Paine, McKay and Moro (2013), most of these studies rely on the views of volunteers, specific social groups (women, refugees and higher education students) and rely on small sample sizes or anecdotal evidence (see also Booth, Park and Glomb 2009). They tend to suggest that competence development is one of the benefits of involvement in volunteering.

Ellis Paine et al. (2013) argue that the desire to learn new skills can be an important motivator for volunteering. Kamerade and Ellis Paine (2014) report that several studies suggest that volunteering enhances individual employability, through gains in aspects such as knowledge, skills, work attitudes, confidence, self-esteem (Hirst, 2001; Nichols and Ralston, 2011). Volunteers declare that volunteering activities enhance both ‘hard’ (business management, IT specific skills, etc.) and ‘soft’ (communication, team-work, management and organisational skills, etc.) skills (Gerogy et al. (2000); Hirst, 2001; Peterson, 2004; Cook and Jackson, 2006; Nichols

and Ralston, 2011; Souto-Otero et al. 2013). Vegeris et al. (2010) are more critical in arguing that volunteering does not provide volunteers with the types of skills that employers demand. Evidence on the extent to which these gains result in paid employment is weaker (Adams et al. 2011). The effects on employment seem to vary significantly depending on individual characteristics (age, gender and motivation to volunteer) and circumstances (frequency of engagement in volunteering, employment history, volunteer role and quality of the volunteering experience) (Ellis Paine, McKay and Moro 2013; Hirst 2001).

The literature has largely neglected the issue of skills and competence development through volunteering, has relied on small samples and has tended to focus on the views of volunteers, ignoring the views employers and society at large have regarding the labour market relevance of the skills acquired through volunteering.

2.3 Volunteering and employability: the empirical base

The rich business literature on the use of biographical information in recruitment processes identifies three main factors that impact recruitment decisions: academic achievements, experience and extracurricular activities. However, little of this research has specifically included volunteering activities in their designs, as part of extra-curricular activities. Much of this literature concentrates, restrictively, on graduate recruitment. Several of the studies discussed here are based on the presentation of real or researcher-produced CVs to individuals with recruitment responsibilities for their assessment (e.g. Brown and Campion 1994; Chen et al. 2011; Cole et al. 2007). The main conclusion is that employers do *value* extracurricular activities, including knowledge and competences achieved through volunteering, although the degree of value attached to those depends on certain

conditions such as the number of volunteering experiences, their type and the way in which they are presented. Only one of the studies reviewed (Keenan and Scott 1985) reported that neither membership of clubs and societies nor being an office holder in societies had a high predictive power for final employment decisions.

Volunteering can affect the recruitment process as recruiters have implicit theories that associate experiences with skills sets. Brown and Campion (1994) report that recruiters associate participation in community activities with the development of interpersonal skills and high motivation, and associate ability and motivation with high performance. Thomas (2001), focusing on international volunteering experiences, reports that employers associate such experiences with adaptability, handling responsibility, stress management, self-assurance and problem solving.

Chen et al. (2011) include 'volunteering for community activities' as one of the three items making up an indicator for 'extracurricular activities' used in their study on recruiters' decisions. They find that this indicator is of importance when explaining recruiters' decisions to offer an interview to a candidate, particularly if in-depth information on the activities is provided. As it could be expected, the type of involvement in extracurricular activities (e.g. undertaking leadership roles or not) will affect the skills and competences developed and the value that employers attach to them (Walker 2010). As Chen et al. (2011) note, the effects of CV content on hiring recommendations are mediated by recruiters' perceptions of person-job fit and person-organisation fit. Participation in certain extracurricular activities is interpreted as a signal of the personality of the young person (Tomlinson 2007). Moreover, applicants' life experiences –such as volunteering- may enhance recruiters' similar-to-me effects in relation to those applications (Tsai et al. 2011). Similar-to-me effects enhance the value that recruiters attach to applications.

Some studies have started to look at the interaction effects between qualifications, experience and extracurricular activities –not only at their separate influence over recruitment decisions. Cole et al. (2007) make use of multilevel modelling to estimate such interaction effects and report that applicants ranked high in all three dimensions (qualifications, experience and extra-curricular activities) unsurprisingly receive the highest employability rankings. But recruiters also judge applicants with low academic qualifications that rated high in work experience and extracurricular activities as being highly employable. Thus, one dimension can compensate for another, even if the weak dimension is qualifications. In fact, people performing highly in extracurricular activities can be seen to have a specialist skill set.

The literature thus suggests that employers value extra-curricular activities generally, but has less to say regarding volunteering specifically. Moreover, much of the economic literature does not clarify whether the reported economic returns to volunteering are due to specific characteristics of those who volunteer, such as assumed personal qualities, or a result of improved job-matching based on the additional information volunteering provides to recruiters, rather than to competences the labour market may consider to be develop through volunteering. This is an aspect in relation to which the present study contributes, as it asks IHP to think abstractly about the benefits of volunteering for competence development, and provides an insight into their general assumptions about the value of volunteering for competence development. Most previous research has looked at individual motivations to volunteer, rather than society's views on its benefits, often focused on the views of students (rather than those of the general population or IHP), and tended to cover a very limited number of countries (often one or two).

3. Research questions, data and methods

The empirical analysis explores the acceptance of the investment model of volunteering in EU27 countries, paying particular attention to variations between the general population and IHP, the demographic factors associated with the acceptance of that model, and to whether national differences in the acceptance of the investment model are better explained by institutional variations between countries. It addresses the following research questions:

RQ1- What is the level of acceptance of the investment model of volunteering in EU27 countries?

RQ2-To what extent does adoption of the investment model among individuals with hiring potential differ from the general population?

RQ3-How do demographic characteristics relate to the acceptance of the investment model amongst IHP and the general population?

RQ4- Are differences better explained by variation between countries or cross-national demographic groups?

RQ5- Do institutional characteristics related to labour market competitiveness, the specialisation of the education system, the strength of the continuing vocational training system and culture affect the adoption of the investment model?

Data are taken from the Special Eurobarometer 75.2 on volunteering and intergenerational solidarity, which contains nationally representative samples for the 27 EU countries. Fieldwork for the survey took place between April and May 2011, with responses from 26,825 European citizens aged 15 and over. Among other questions, the survey asked respondents about the main benefits of volunteering. Volunteering is a complex phenomenon that is not clearly delineated and can encompass a variety of activities, organisations and sectors. Some definitions provide

concrete specifications as to the minimum time that needs to be devoted to qualify as volunteering, whether certain material rewards are allowed or not, whether relatives can be included as the beneficiaries and whether only activities with certain pre-defined intentions should be considered volunteering. A broad definition of volunteering was provided by Wilson (2000:215), who referred to “any activity in which time is given freely to benefit another person, group or cause”. The ways in which questions about volunteering are asked in surveys can have implications for the results obtained (Lyons, Wijkstrom and Clary, 1998). Volunteering was not defined for the respondents, and it is therefore likely that most had a broad definition of volunteering in mind. However, the lack of definition implies that representations of volunteering may differ from country to country, which may affect the results reported –a recurrent problem with multi-country research. The variable that measures participation in volunteering in the Eurobarometer survey differentiates between no, occasional and regular participation (again as judged by respondents), and this differentiation is utilised in the analysis of the importance of individual factors –the distribution of responses by countries regarding this variable is provided in the appendix (Figure A3). It should be noted that empirical research suggests that there is a large cross-cultural consensus in the public perceptions of who is considered ‘definitely a volunteer’ (Meijs et al. 2003). While it would be beneficial to have data on the type of volunteering undertaken by volunteers, such information was not collected in the survey.

Respondents were asked to select two of seven options regarding the main benefits of volunteering: civic participation, strengthening of the fundamental values of solidarity in the EU, enhancing social cohesion, benefitting the European economy, environmental protection, self-fulfilment and personal development and ‘the

acquisition of knowledge and competences which allow a good professional integration.' The last of these provides a measure of respondents who prioritised the individual returns of volunteering, in terms of competence and employability benefits, vis-à-vis other benefits. This measure provides a reasonable match with the premises of the investment model of volunteering. It should be noted that we do not wish to infer motivation from the data, so our claim is not that those individuals who reported that employability developments from volunteering consider that this is a key *motivation* for volunteering. The estimates provided below regarding the acceptance of the investment model of volunteering reported are a 'lower bound' development, as those surveyed may consider that volunteering contributes to the acquisition of professionally relevant knowledge and competences, but to a lower extent than to two other aspects.

Variations in respondents' views of volunteering were explored making use of demographic and national covariates, selected on the bases of the literature review presented in Section 2. Table 1 presents a summary of the individual-level demographic covariates employed in the logistic regression analysis and associated expectations.

Table 1: Summary of demographic covariates used in the logistic regression, with mean values.

Individual Level				
Gender	Gender (0 = Male, 1 = Female)	Binary/dummy	+	51.8%
Age	Age in years	Continuous	-	45.8
Education	Completed at least 15 years formal education (0= not completed; 1= completed)	Binary/dummy	+	87.1%
Employment	Respondent is employed	Binary/dummy	-	45.7%
Social class	Self-assessed position in society (1 - 10)	Continuous	?	5.4
Urban residence	Respondent lives in urban location (suburban and rural = 0; urban = 1)	Binary/dummy	-	27.5%
Children	Number of children under 10 in home	Continuous	-	0.31
Volunteering (Occasional)	Participates in volunteering occasionally	Categorical	+	15.8%
Volunteering (Regular)	Participates in volunteering regularly	Categorical	+	11.9%
Political views	Political views: 0 (left) to 10 (right)	Continuous	+	4.3
National Level(a)				
Unemployment	Percentage of unemployed people	Percentage	+	10.7%
Educational Specificity	Vocational secondary education enrolment (levels 2 & 3, ISCED 2011) as a percentage of all secondary enrolment	Percentage	-	26.6%
Strength of active labour market policies	Percentage of work age population participating in activation support (training measures)	Percentage	-	0.61%
Strength of continuing vocational training employed (CVT)	Percentage of the workforce participating in CVT courses (all enterprises with more than 10 employees)	Percentage	-	23.2%
Individualism	Individualism/ collectivism (range: 0= maximum collectivism; 100= maximum individualism)	Percentage	+	59.6

Sources for the national-level variables: unadjusted unemployment rate for the year 2013, aged 15 to 64 (Eurostat); Individualism/ collectivism score: Hofstede national cultural dimensions index[2]; Hofstede Centre, various years; Active Labour Market Policies: Activation-Support labour market policy (training measures) participants per 100 persons wanting to work, for the year 2013 (CY=2012; CZ=2008; UK=2009). (DG Employment/ Eurostat); CVT: Percentage of employees (all enterprises) participating in CVT courses. Continuing Vocational Training Survey, for the year 2010 (Ireland: 2005) (Available from Eurostat); Educational specificity:

[2] National culture: Hofstede's collectivism/ individualism scores rank countries on a scale from 0 (fully collectivist) to 100 (fully individualist), based on the response to the same attitude survey questions by essentially matched samples in each country for which the scales are available. In this scale, individualism pertains to societies in which ties with individuals are loose and individuals are expected to look after themselves or their immediate family. Collectivism pertains to societies with high levels of integration and cohesiveness within groups, which protect individuals in exchange for loyalty. This scale has been exhaustively tested and has been employed in a large number of studies (see Hofstede, Hofstede and Minkov 2010; for a discussion of common criticisms to Hofstede's cultural dimensions, see Hofstede 2002).

UNESCO Institute for Statistics Enrolment in Secondary General and Enrolment in General Vocational for the year 2013. Active Labour Market Policy and CVT are multiplied by the unemployment and employment rates, respectively, which provides participation as a percentage of the total work-aged population. (a) Data for CY are excluded from the averages for national-level variables because CY was not included in the models of those variables. This was due to lack of data on the individualism variable for CY.

These included: age, gender, years of education, political affiliation measured on a scale of 1 ('left') to 10 ('right'), previous participation in volunteering (none/ occasional/ regular), urban/suburban-rural residence, 'level in society' (which we also refer to as 'class') from 1 ('lowest') to 10 ('highest'), number of children below 10 in the household and occupational status. Regarding education, respondents were asked the age at which they complete full-time education, which was used to create a binary of those who had completed at least 15 years of full-time education (i.e. those who could be expected to have completed all or most of secondary education). The survey included a question on 'current occupation,' asking respondents to select from 19 occupational categories (TSN 2011). This information was used to compute a new variable identifying individuals who are likely to make or influence decisions regarding hiring and employment (IHP). Those individuals who identified their occupations as 'business proprietors' or owners, employed professionals -which included employed doctors, lawyers, accountants and architects-, directors and general/ top managers, and middle managers were included in the 'IHP', or individuals who potentially could make hiring decisions, category. This new variable was utilised to assess the views of those individuals whose judgements on extra-curricular activities have a greater effect on hiring decisions.

The central focus of the analysis is whether differences in the national context or – conversely - cross-national demographic groups are more closely related to the adoption of the investment model of volunteering. To this end, we also included national-level data on five key variables related to the labour market, education and

training system and culture: national unemployment level, degree of specificity of the education system, strength of the continuing vocational training system (for people in employment and training under active labour market policies for people in unemployment), and the level of individualism. A highly competitive labour market, which exhibits high unemployment rates, may increase the need for employability-related investments, including volunteering. In those countries where the education systems mainly relies on general secondary programmes and produces more generic skills that are demanded in the labour market (Hall and Soskice 2001) there may be a higher acceptance of the employability value of volunteering, as participation in volunteering could be expected to result in the development of generic skills, such as communication, leadership or organisational skills (Souto-Otero et al. 2013). We anticipate that a trade-off between the strength of the continuing vocational training system and the investment model of volunteering. Higher take-up of opportunities for professional training in the country may reduce the extent to which volunteering is associated with the development of professionally relevant competences. As other opportunities offered by continuing vocational training are used, these may be considered sufficient and/ or more relevant for the development of such competences, and volunteering may be seen less often as an alternative provider of those competences, reducing the prioritisation of the investment model. We check this separately in relation to continuing vocational education and training for employed and training under active labour market policies for unemployed people. Regarding national culture, in more individualistic culture, the private benefits of volunteering may be emphasised more than in collectivist cultures[3].

[3] We would like to thank one of the reviewers for the suggestion to include variables on the strength of continuing vocational training and culture in the analysis.

In order to investigate these relationships, the data were analysed using a combination of descriptive statistics (to identify broad patterns in the data and the distribution of variables) and inferential methods (logistic regression and multilevel logistic regression) to model the probability that an individual in the sample would prioritise the investment model of volunteering as an outcome of the set of demographic predictors, identify differences between IHP and the full set of respondents and test for differences across national contexts.

4. Findings

The analysis is structured in two parts: the first presents descriptive statistics on the prevalence of the investment model of volunteering across Europe, and the second presents the outputs of three logistic regression models. Each regression model is estimated on the complete data set and the subset of IHP, yielding a total of six sets of parameters.

4.1 Descriptive statistics

Before undertaking statistical modelling of the data, we looked at how the investment model of volunteering was adopted across EU27 countries and between the general population and IHP. Table 2, which gives the proportion of respondents who prioritised the employability benefits of volunteering, shows that over one-fifth (21%) of respondents in the general population reported to believe that the 'facilitation of knowledge and competencies which allow a good professional integration' is one of the two main benefits of volunteering. IHP exhibit very similar views to other respondents: also 21% reported to consider professionally relevant competence development as one of the two main benefits from volunteering.

Table 2: Percentage of respondents who prioritised the professional benefits of volunteering by country, for all respondents and those likely to influence employment decisions

Country	Code	All Respondents	Likely Employers	Emp. Differential
Austria	AT	23.2%	21.8%	-1.4%
Belgium	BE	19.1%	17.7%	-1.4%
Bulgaria	BG	23.6%	29.0%	5.4%
Cyprus	CY	23.2%	27.5%	4.3%
Czech Republic	CZ	12.9%	18.4%	5.5%
Germany	DE	19.5%	18.3%	-1.2%
Denmark	DK	18.4%	17.3%	-1.1%
Estonia	EE	24.0%	26.8%	2.8%
Spain	ES	16.4%	18.8%	2.4%
Finland	FI	17.7%	8.6%	-9.1%
France	FR	16.7%	20.4%	3.7%
Great Britain	GB	32.1%	31.5%	-0.6%
Greece	GR	20.6%	16.8%	-3.8%
Hungary	HU	29.1%	23.0%	-6.1%
Ireland	IE	16.0%	17.5%	1.5%
Italy	IT	25.2%	20.6%	-4.6%
Lithuania	LT	23.5%	27.6%	4.1%
Luxembourg	LU	24.5%	10.5%	-14.0%
Latvia	LV	19.9%	32.3%	12.4%
Malta	MT	15.4%	19.1%	3.7%
Netherlands	NL	21.7%	18.0%	-3.7%
Poland	PL	23.8%	28.2%	4.4%
Portugal	PT	14.1%	11.8%	-2.3%
Romania	RO	26.8%	31.0%	4.2%
Sweden	SE	33.0%	23.4%	-9.6%
Slovenia	SI	16.7%	17.8%	1.1%
Slovakia	SK	16.5%	15.5%	-1.0%
All Countries	EU27	21.3%	21.3%	0.0%
N		26,825	3,142	

Table 2 also shows that views vary considerably by country: from 14.1% of respondents in the Czech Republic prioritising the employability value of volunteering

to 33.0% in Sweden. Sweden, Great Britain, Hungary and Romania are top. Czech Republic, Portugal, Malta, Ireland, Spain, Slovakia and Slovenia are bottom. The range for the prioritisation of the employability benefits of volunteering from IHP is wider: from a low of 8.6% in Finland (also low are Luxembourg, Portugal and Slovakia) to 32.3% in Latvia (which is followed by Great Britain, Romania, Bulgaria, Poland and Lithuania). Latvia, the Czech Republic, Bulgaria, Lithuania and Cyprus show the largest differences in the acceptance of the prioritisation of the employability benefits of volunteering between all respondents and IHP, in favour of IHP –this is, IHP reporting higher prioritisation of the employability benefits, than society at large. The opposite trend -with social prioritisation of the employability benefits of volunteering being above those of IHP- is particularly marked in Sweden, Finland, Hungary and Luxembourg.

Geographic patterns in the adoption of the prioritisation of the employability benefits of volunteering among all respondents are displayed in the appendix (Figure A1). Table A1 shows that the employability benefits of volunteering were more frequently reported together with 'social cohesion' benefits in the case of all respondents, and with 'personal development' in the case of IHP.

4.2 Logistic regression

Logistic regression is a form of generalised linear modelling that expresses the probability of a binary outcome as a function of predictor variables and associated coefficients. These coefficients can be used to assess how they contribute to the probability of the outcome, including the magnitude of their effects and their statistical significance. Multilevel implementations of logistic regression account for nested or multilevel data, in our case the sampling of individuals within European nation-states

(Pinheiro and Bates, 2000). This approach allows for combined modelling of group variables (e.g. national unemployment) and individual variables (e.g. age, gender). Our binary outcome is the prioritisation of the professional benefits of volunteering in the Eurobarometer survey, and the predictors are the set demographic and national-level variables.

We model the data in three ways (Table 3): our first model uses a fixed-effects model to examine the relationship between demographic variables and prioritisation of the investment model of volunteering, without accounting for national differences. The second model extends the first by taking a multilevel approach: a random intercept is used to account for national differences (in other words, a separate intercept is calculated for each country, with parameter estimates that maximise within-country and between-country-fit). Finally, we add five national-level predictors: unemployment levels, specificity of the education system, strength of continuing vocational training (for the employed and training under active labour market policies for unemployed people) and individualism, to test the extent to which aspects of the national labour market, education and training and culture are related to different patterns of prioratisation of the investment model of volunteering.

Table 3: Results of logistic regression models for all individuals and individuals with high hiring potential

	Models					
	Model 1		Model 2		Model 3	
	All	IHP	All	IHP	All	IHP
Individual Level						
Intercept	-1.42***	-1.16**	-1.25**	-1.10+	-1.13**	-0.63
	(0.12)	(0.59)	(0.14)	(0.60)	(0.37)	(0.76)
Gender (female)	0.06+	0.11	0.06	0.12	0.06+	0.12
	(0.04)	(0.10)	(0.04)	(0.10)	(0.04)	(0.10)
Age	-0.003*	-0.01	-0.01**	-0.01	-0.01**	-0.01
	(0.001)	(0.005)	(0.001)	(0.005)	(0.001)	(0.005)
Education	0.14*	0.29	0.06	0.18	0.05	0.08
	(0.06)	(0.50)	(0.06)	(0.51)	(0.06)	(0.51)
Employment	-0.06		-0.07		-0.08+	
	(0.04)		(0.05)		(0.05)	
Social Class	0.03*	-0.03	0.02	-0.02	0.03*	0.001
	(0.01)	(0.04)	(0.01)	(0.04)	(0.01)	(0.04)
Urban Residence	0.10*	0.06	0.07	0.02	0.06	0.01
	(0.04)	(0.11)	(0.04)	(0.11)	(0.04)	(0.11)
Children	-0.02	-0.07	-0.02	-0.08	-0.02	-0.07
	(0.03)	(0.08)	(0.03)	(0.08)	(0.03)	(0.08)
Volunteering (Occasional)	0.03	0.02	0.08+	0.07	0.08	0.05
	(0.05)	(0.13)	(0.05)	(0.13)	(0.05)	(0.13)
Volunteering (Regular)	-0.02	0.02	0.02	0.07	0.03	0.10
	(0.06)	(0.14)	(0.06)	(0.15)	(0.06)	(0.15)
Political Views (Right)	0.01	0.01	0.01	0.01	0.01	0.01
	(0.01)	(0.02)	(0.01)	(0.03)	(0.01)	(0.03)
National Level						
National Unemployment					-0.01	0.002
					(0.01)	(0.01)
Vocational Specificity					0.0001	-0.01
					(0.01)	(0.01)
Continuing Vocational Training					-0.01+	-0.02
					(0.01)	(0.01)

Active Labour Market Policies					-0.26* (0.10)	-0.31* (0.13)
Individualism					0.01+ (0.003)	0.004 (0.004)
σ Random effects	--	--	0.30**	0.21**	0.21**	0.05
Groups	--	--	27	27	26	26
Pseudo R2	0.002	0.002	0.002	0.002	0.010	0.013
N	18,068	2,265	18,068	2,265	17,831	2,250
BIC			18,705.73	2,425.83	18,504.35	2,433.03

+p < .1; *p < .05; **p < .01

Cyprus was excluded from model 3 due to lack of data on the individualism variable.

Coefficients represent the change in the log-odds of mentioning employability as a benefit to volunteering, with standard errors given in brackets. Psuedo-r^2 are computed using procedures described by Cox and Snell (1989).

Model 1 expresses the probability of a respondent prioritising the investment model of volunteering as an outcome of the set of demographic variables described above in Table 1. Results from all respondents show that several of the demographic variables are significantly related to the probability that an individual would prioritise the investment model of volunteering. The probability of prioritising the investment model of volunteering is higher for females, those who have completed at least 15 years of education and those in urban locations, and decreases with respondents' age, all of which conform to our expectations. The probability increases with self-reported social positioning. The results for political views, participation in volunteering (except for 'all/ regular'), household composition and occupational status have the expected sign, but the results are not significant. However, for IHP, no demographic variables are significant, indicating that those who may actually make hiring decisions are more homogenous in their views of the employability benefits of volunteering.

Model 2 adopts a multilevel approach, adding a random intercept for national differences and retaining fixed effects for demographic variables. When these national differences are taken into account, many of the demographic relationships become non-significant. For the full-set of respondents, the only significant predictors of mentioning the employment benefits of volunteering are age, with older respondents significantly less likely to mention the benefit, and occasional volunteering. The effect size is small for age, but it scales in years and can therefore alter the probability substantially. The effect of occasional volunteering –but not regular volunteering- may indicate that those individuals who are regularly involved in volunteering may have a less instrumental view of volunteering and as a result prioritise other benefits above skills development. In contrast to all respondents, among IHP no demographic variables are significantly related to mentioning the employment benefits of volunteering. For both the full set of respondents and the IHP subset, national variations in mentioning the employment benefits of volunteering are significant, although for IHP the variation is smaller. Thus, results suggest that the differences associated with demographic variables in Model 1 (i.e. gender, education, age, residence, and social class) are better explained through national variation.

Model 3 extends Model 2 by including national-level covariates for unemployment, vocational specificity, strength of participation in continuous vocational training, and training under active labour market policies and individualism. For the general population model, age and social class are the only significant individual level variables in Model 3. Regarding national variables, the effects of unemployment and vocational specificity are not significantly different from zero, but training under active labour market policies shows a significant, negative relationship to prioritization of the investment model of volunteering. Individualism and the strength of training under

continuing vocational training are only significant at the $p<0.1$ level. These results thus provide some evidence of a trade-off between the take-up of professionally relevant training and prioritisation of the investment model. This is particularly clear in relation to unemployed people: thus, when those who are further away from the labour market have lower opportunities for professional training through active labour market policies the investment value of volunteering is more prevalent. As a corollary, higher take-up of opportunities for professional training in the country, in particular by the unemployed, reduces the extent to which the investment model is prioritised. For IHP no individual level variables are significant; regarding national level variables, the strength of training under active labour market policies is significant. There is thus also some evidence of trade-off between national provision of training to the unemployed through active labour market policies and the prioritisation of the investment model amongst IHP.

The regression results show that variation in the acceptance of the investment model is more attributable to differences between countries than cross-national demographic groups. This is evident in the standard deviation of random-effects (Models 2 and 3), which indicate typical variation due to country differences. Typical between-country variations is larger than most of the cross-country demographic variables, and significant. However, for IHP the between-country variation is less than for the entire respondent sample (country variance at level 2 in the multilevel regression models is lower for IHP, which means that they vary less based on the country than people in the general population), and it becomes non-significant when national characteristics are taken into account (Model 3). IHP are more homogenous in their views, both at the individual level and at the national level.

For both multilevel models, we tested the influence of each country to see whether one particular country's observations disproportionately influences the model fit, a key concern in international survey research (Van der Meer et al, 2010). This approach involves iterative fits of the model, omitting a different country on each iteration, with the expectation that a valid model will not differ significantly depending on the omission of a particular country (Nieuwenhuis et al 2012). Using procedures recommended by Van der Meer et al, we established only one case (Sweden) that might exert undue influence on results. However recalculation of Model 3 with Sweden omitted (see appendix, Table A2), do not differ substantially from those presented in Table 3 in relation to country-level variables or individual-level variables –gender becomes non-significant whereas occasional volunteering, employment and urban residence significant. Thus, it appears that the reported national-level variation is not due to the presence of highly influential cases. We also tested for differences between volunteers and non-volunteers. The results show in general only small variations: gender and urban residence are significant for volunteers only, and social class for non-volunteers only (see appendix, Table A2).

For all models, the low pseudo-r^2 values - computed using Cox and Snell's (1989) methods - give some cause for concern. However, Hosmer and Lemeshow (2000) note that low r^2 values are typical for logistic regression (e.g. and that the approximated measures are based on comparisons to the predicted values of an intercept-only model rather than a true measure of goodness-of-fit). Thus, to determine the validity of the model, we examined plots of predicted probabilities versus observed outcomes using procedures described by Greenhill et al (2011). These results are presented in the online supplement, and generally show a good fit

with higher predicted probabilities corresponding to a greater frequency of observed responses (i.e. respondents prioritising the investment model).

5. Conclusions

While most studies on volunteering have focused on the individual motivations to volunteer and its determinants, this study has examined social views on the benefits of volunteering, on which there is a striking scarcity of empirical analyses (Dekker and Halman 2003). The specific focus has been on the acceptance of the investment model of volunteering across EU-27 countries, looking at the interaction between volunteering and the development of professionally relevant competences. The article explored the variations that exist between the general population and likely employers (IHP) in such acceptance, and how demographic characteristics relate to the acceptance of the investment model in both groups. We were also concerned with whether the differences found in levels of acceptance could be better explained by variations between countries or cross-national demographic groups.

There is very little difference in the extent of acceptance of the model between the general population and IHP: around a fifth of respondents in each group prioritised the employability benefits of volunteering over other benefits. There are, however, differences in how demographic characteristics relate to the acceptance of the investment model in these two groups.

We found significant age and class differences for the general population, but contrary to expectations, no significant results were obtained for gender, education, residence, household composition, employment status, previous participation in volunteering and political views. These findings suggest that the socio-economic factors affecting the importance given to the investment model of volunteering differ

substantially from those affecting participation in volunteering (Hustinx et al, 2010b). Regarding national-level variables, the weakness of alternative forms of upskilling for the unemployed, in particular, increases the prioritisation of the investment model, suggesting that volunteering may fill a gap when such opportunities are absent.

Moreover, we find that by contrast to the general population, IHP were a surprisingly homogeneous group. This is a positive result for those individuals who have volunteered/ will volunteer with an employability benefit in mind. No demographic characteristics are significant for this group. Regarding national-level variables, only the strength of training for unemployed people is significant; like in the case of the general population it has a negative relationship with the prioritisation of the investment model of volunteering.

Our analysis pointed out that differences in the data are explained by variation between cross-national demographic groups, for the general population but not for IHP, and also variation between countries. The regression results show that variation in the acceptance of the investment model is more attributable to differences between countries than cross-national demographic groups. However, it should be noted that for IHP the between-country variation is less than for the entire respondent sample and it becomes non-significant when national characteristics are taken into account.

Much sociological literature has underlined the political and ‘good citizenship’ benefits of volunteering (Putnam 2000; Wuthnow 1998). But our findings reject the notion that social and labour market views of volunteering are based on pure ‘consumption’ or ‘public goods’ models of volunteering, in which utility from volunteering is derived from the act of giving in itself or the provision of valued public goods and services –see Roy and Ziemek (2000) for details. Instead, the results provide support to mixed-

models of volunteering (Etzioni 2000), based on ‘mutuality’ and reciprocal relations, which acknowledge the role of other factors beyond competence development and employability in volunteering, but do not neglect these benefits either: volunteers benefit from their work also in terms of their own education and training, which bestows some equality on the volunteering relationship. Our findings also have significant implications for academic queue models and human capital theory, and particularly for the articulations of these that relate the development of skills and competences restrictively to formal schooling. Instead, our results point towards the importance of an ‘economy of experience’ (Brown and Hesketh 2004), where human capital is no longer exclusively represented by academic credentials, but is also seen to be gained through various activities other than formal education, including volunteering experiences. For those individuals entering employment straight after school/ university with little relevant work experience, the development of the experience-side of human capital may be particularly important to enhance their employability (Holdsworth 2010). This, in turn, suggests that further consideration should be given to addressing inequalities of opportunity to take-up volunteering for people from different socio-economic backgrounds. It also suggests that there is greater scope to explore the knowledge, skills and competences that volunteering can help to progress -particularly where other human capital development activities would be less effective- and is perceived to progress, especially by employers. Kamerade and Paine (2014) go further to argue that targeted volunteering for employability programmes could be a cost-effective targeted human resource development activity, and Booth et al. (2009) for a skills-matching alliance between employers and volunteer organisations.

Further research should also explore other factors that drive national differences in the acceptance of the investment model of volunteering. In this respect, the analysis of the importance of differences in the nature of volunteering across countries (for example in terms of the formality/ informality of arrangements, the volume of take-up of volunteering or the kinds of volunteering activities that are prevalent) would deserve particular attention, as possible further explanations to the national differences found.

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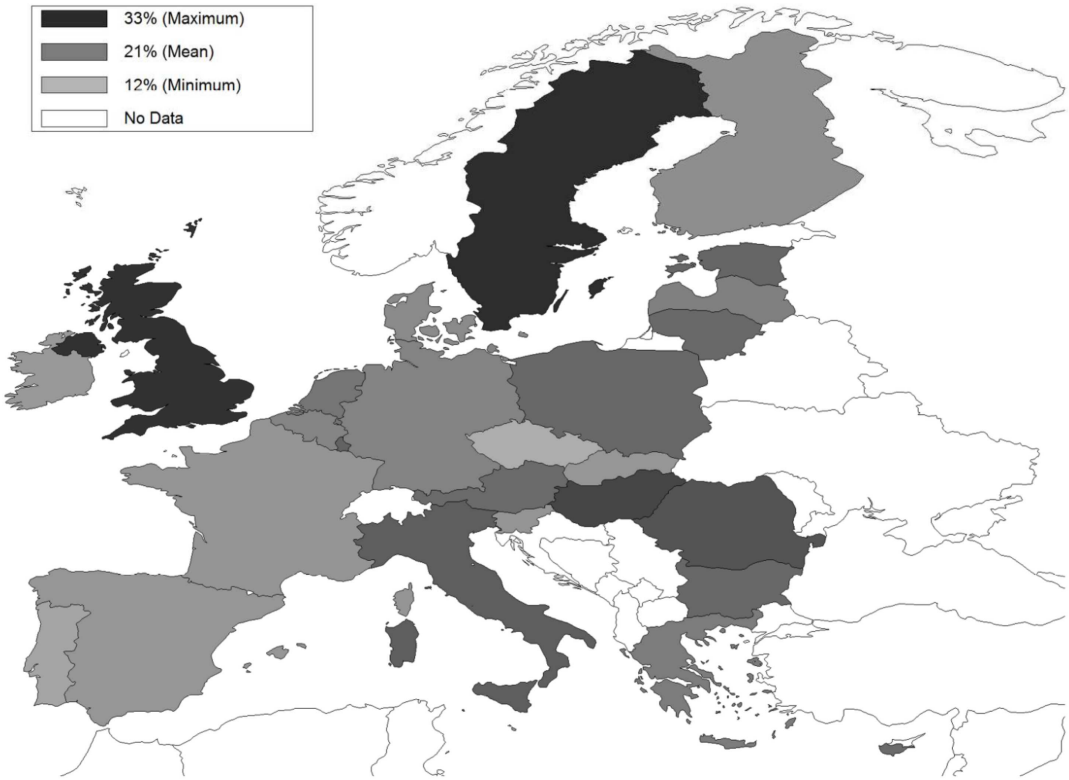
Supplementary Information

Geographic Distribution of the Employment Model

Figure A1: National differences in the adoption of the investment model of volunteering across countries, for all respondents.



Conditional Probabilities

Table A1: Conditional probabilities for respondents' beliefs about the benefits of volunteering.

	All Respondents					
	Civic Participation	Professional Skills	EU Solidarity	Cohesion	Economy	Environmental Protection
Professional	0.125					
EU Solidarity	0.179	0.116				
Cohesion	0.220	0.208	0.268			
Economy	0.071	0.088	0.084	0.059		
Environment	0.098	0.121	0.118	0.126	0.134	
Personal Dev.	0.179	0.207	0.146	0.209	0.116	0.155

	Likely Employers					
	Civic Participation	Professional Skills	EU Solidarity	Cohesion	Economy	Environmental Protection
Professional	0.134					
EU Solidarity	0.165	0.115				
Cohesion	0.249	0.228	0.305			
Economy	0.053	0.066	0.067	0.048		
Environmental	0.092	0.103	0.126	0.118	0.144	
Personal Dev.	0.199	0.236	0.156	0.234	0.138	0.155

Respondents were asked two select two of seven options corresponding to civic participation, the development of professional knowledge and competencies, increasing solidarity in the EU, promoting social cohesion, benefitting economy, environmental protection, and personal development. The matrix shows the probability of selecting the each of the possible benefits, given the other choice, and can be used to determine the frequency with which two options go together.

Interpreting Regression Coefficients

For all models, the dependent variable Y is given as the log odds of a positive outcome on the dependent variable. The log odds can be converted to a probability using following formula.

$$\text{Probability} = \frac{e^Y}{1+e^Y}$$

Y is computed based on the parameter estimates presented in Table 3 (including the intercept) and the value of dependent variables. Thus, for a 20-year old female who has completed secondary education and is employed (with values of zero for other variables), Y is computed as:

$$Y = -1.424 + 0.062\times1 - 0.003\times20 + 0.138\times1 - 0.055\times1 = \mathbf{-1.339}$$

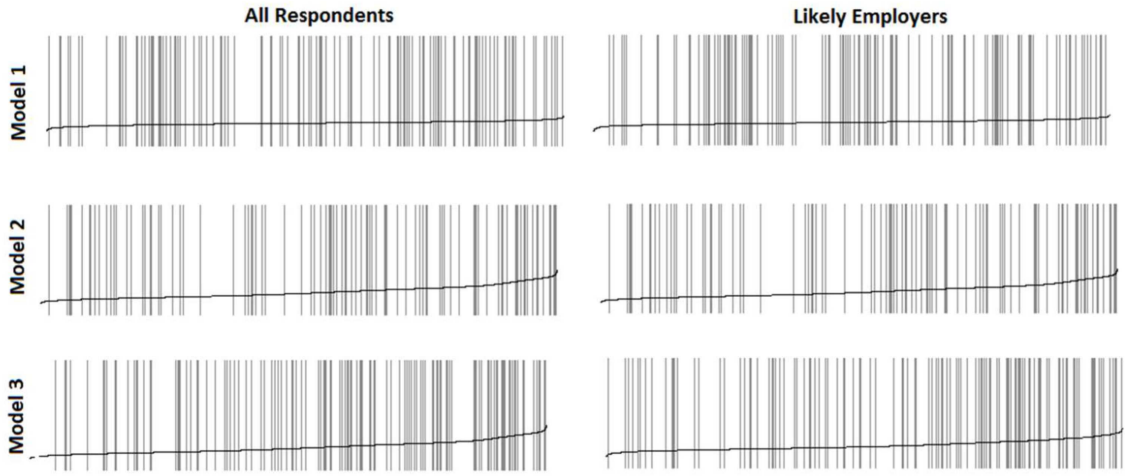
This value of Y yields a probability of:

$$\text{Probability} = \frac{e^{-1.339}}{1+e^{-1.339}} = \mathbf{0.208}$$

Regression Separation Plots

Separation plots as described by Greenhill et al (2013) offer a convenient way to diagnose and assess logistic regression models. Observations are arranged from left to right in order of increasing predicted value: those on the far right have the highest predicted probability. Dark vertical lines denote an observed outcome of the dependent variable (i.e. a respondent who selected employment as a key benefit to volunteering). For a perfect model, all observed outcomes would related to higher probabilities, and the plot would be completely divided into those who did not mention employability on the left, and those who did on the right.

Figure A2: Separation plots for Models 1 and 2, with separate plots for all respondents and those likely to influence hiring.



Results show that the prevalence of observed outcomes increases with the predicted probability and that the overall fit of Model 2 is better than Model 1.

Extended Model 3 Results

Table A2 – Alternate specifications of Model 3. The first column provides the original results presented in the text. The second column removes results from Sweden, as this case yielded a higher leverage than other countries. The third and forth column show results for volunteers and non-volunteers, respectively.

Additional Models

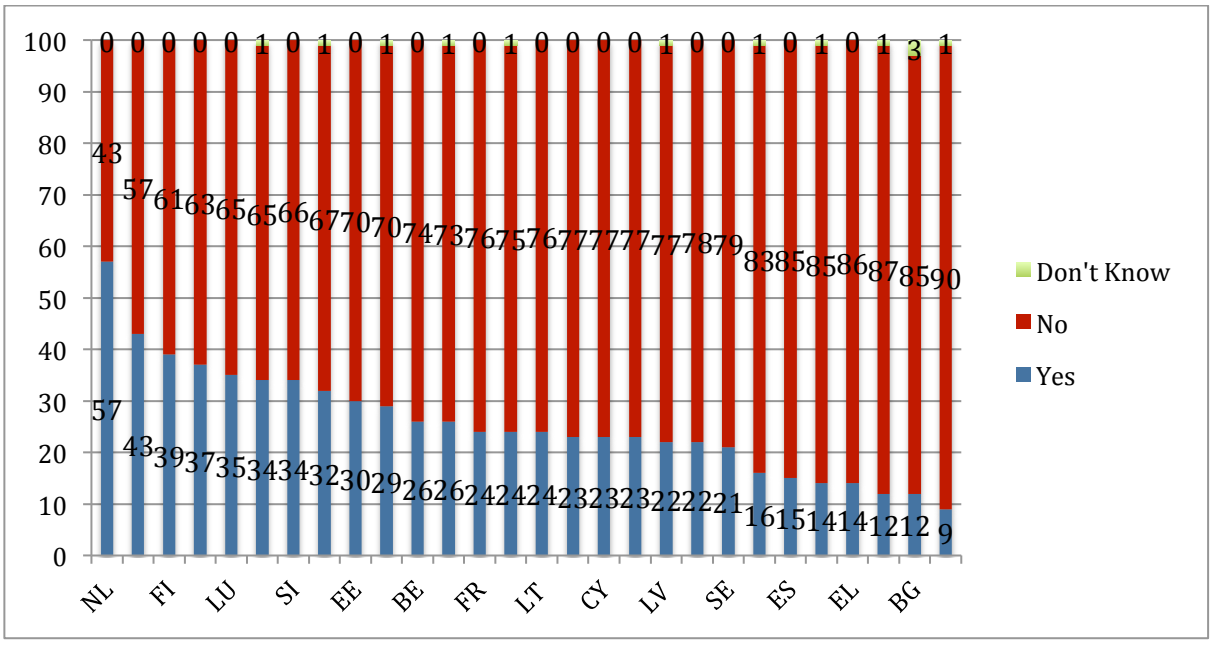
	Logit			
	Original	Sweden Removed	Volunteers	Non-Volunteers
<u>Individual Level</u>				
Intercept	-1.13** (0.37)	-0.89** (0.31)	-0.55 (0.49)	-1.30** (0.39)
Gender (Female)	0.06+ (0.04)	0.05 (0.04)	0.12+ (0.07)	0.03 (0.04)
Age	-0.01** (0.001)	-0.01** (0.002)	-0.01** (0.003)	-0.003+ (0.002)
Education	0.05 (0.06)	0.04 (0.07)	0.10 (0.15)	0.03 (0.07)
Employment	-0.08+ (0.05)	-0.06 (0.05)	-0.13 (0.09)	-0.06 (0.05)
Social Class	0.03* (0.01)	0.03* (0.01)	-0.01 (0.02)	0.05** (0.02)
Urban Residence	0.06 (0.04)	0.10* (0.04)	0.18* (0.08)	0.03 (0.05)
Children	-0.02 (0.03)	-0.002 (0.03)	-0.06 (0.05)	0.001 (0.04)
Volunteering (Occasional)	0.08 (0.05)	0.10+ (0.05)		
Volunteering (Regular)	0.03 (0.06)	0.06 (0.06)		
Political Views (Right)	0.01 (0.01)	0.01 (0.01)	0.02 (0.02)	0.01 (0.01)
<u>Country Level</u>				
National Unemployment	-0.01 (0.01)	-0.01 (0.01)	0.002 (0.01)	-0.01 (0.01)
Vocational Specificity	0.0001 (0.01)	-0.001 (0.004)	-0.004 (0.01)	0.001 (0.01)

Continuing Vocational Training	-0.01+ (0.01)	-0.02** (0.01)	-0.01 (0.01)	-0.01+ (0.01)
Active Labour Market Policies	-0.26* (0.10)	-0.18* (0.08)	-0.27* (0.12)	-0.25* (0.11)
Individualism	0.01+ (0.003)	0.005+ (0.003)	0.01 (0.004)	0.01+ (0.004)
σ Random1	0.21**	0.15**	0.16**	0.21**
Groups	26	25	26	26
Pseudo R2	0.010	0.012	0.014	0.011
N	17,831	16,939	4,963	12,868
BIC	18,504.35	17,329.94	5,280.93	13,332.20

+p < .1; *p < .05; **p < .01. Cyprus was excluded from the analysis due to lack of data on the individualism variable.

Take up of volunteering on a regular and occasional basis by country

Figure A3: Take-up of voluntary activity on a regular or occasional basis



Source: TNS Opinion and Social (2011) Volunteering and intergenerational solidarity. Eurobarometer 75.2. Luxembourg, Office for Official Publications of the European Communities.